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**(54) Calibration of a N-port receiver**

(57) A technique for calibrating a N-port receiver, such as for example a 5- or 6-port receiver is proposed. The N-port receiver (1) comprises a first input (2) for a RF signal to be detected, a second input (3) for a RF signal originating from a local oscillator (4) and N-2 output terminals. Calibrating signals are generated on the basis of the RF signal supplied by the local oscillator (4). The calibration signals are fed to the first input (2) and/or the second input (3) of the N-port receiver (1). Calibration coefficients are calculated on the basis of the output signals generated by the N-port receiver (1) in response to the feeding of the calibration signals. The calibration signals are unmodulated signals and are only processed by means of a passive RF circuitry in the calibration device (100).

The solutions according to the present invention allow a simple calibration of N-port receivers, which can be used as IQ demodulators or converters. Thereby a local oscillator (4) is used as a RF source for the calibration.

**FIG 1A**